The Genera *Syntonus* Burr and *Obelura* Burr (Dermaptera : Forficulidae)

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The genera *Syntonus* Burr and *Obelura* Burr were each based on a single species, each with a holotype male. During a recent examination of these closely related types in the British Museum (Natural History) it was noted that neither of thes types, *Syntonus neolobophoroides* (Burr) nor *Obelura tamul* (Burr), have lateral longitudinal ridges, or keels, along their elytra. This is notable since the keys in Burr (1910, 1911) use this character to separate these genera, as below (omitting most other genera and modified):

1. Entirely apterous ..... *Sondax* Burr
– Elytra present 2
2. Elytra without a keel on the costal margin *Syntonus* Burr
– Elytra with a keel on the costal margin 3
3. Elytra perfect, free, wings abortive ..... *Emboros* Burr
– Elytra rudimentary 4
4. Last dorsal segment of male very wide at base, strongly narrowed at apex ..... *Liparura* Burr
– Last dorsal segment of male narrow at base itself slightly angustate, almost square ..... *Obelura* Burr

It is not surprising, considering the dates of publication, that some of these couplets are now incorrect, both *Emboros* and *Liparura* for example, can have rudimentary or free elytra, and *Emboros* can have fully developed elytra and wings, but the significant feature is the placing of *Obelura.* A comparison of the types of *Syntonus* and *Obelura* with types of *Emboros* or *Liparura,* which have lateral longitudinal ridges on the elytra, make it quite clear that neither *Syntonus* nor *Obelura* possess such ridges. The only external differences between these latter two types noted are that *Obelura* has a slender body whilst that of *Syntonus* is broadened (fig. 3; the elytra of the latter are free, whereas in *Obelura* they are adherent to the cuticle, and since this type seems somewhat tenereal the dorsal surface of the elytra is somewhat depressed, so making the dorso-lateral fold of the elytra more conspicuous. The forceps of both types are remarkably similar, each branch being slender and with small denticulations on the inner margin; each branch has a short longitudinal slender ridge near the bast (fig. 3, DR), a feature which also occurs in the Neotropical species *Skalistes lugubris* (Dohrn). No significant differences seem to exist between *Syntonus* and *Obelura,* so it is proposed that these genera be synonymized.

The character of the lateral longitudinal ridges on the elytra is considered of variable value at present, and may be only specific, as in *Vostox berlandi* Hebard (Labiidae); of generic value, as in *Kleter* Burr (Forficulidae); or of subfamily rank, as in Vandicinae (Labiidae). The interpretation of what exactly constitutes a lateral longitudinal ridge tends to vary with authors due to the gradation from a lateral longi-

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tudinal fold to a distinct ridge. A true ridge, however, is distinctive (Brindle, 1978).

Another feature of *Syntonus neolobophoroides* is that although the figure of the holotype in Burr (1910, Pl.VII, fig. 12) shows visible wings, the actual type has no wings visible (fig. 3). That the figure in Burr (1910) is based on the typeis shown by the asymmetry of the forceps, the left branch being much more strongly curved than the right, and this feature, evidently a malformation, is present in the type (fig. 3). The original description of the species does mention "wings absent", so the wings in the figure in Burr (1910) must have been added in error by the artist.

Both of these genera are Oriental, and the inclusion of a South American species, *ensifer* Burr, is in error; the type of *Syntonus ensifer* Burr has been examined and it clearly belongs to the Neotropical genus *Neolobophora* Scudder. A short description of this type is given later.

Obelura Burr

Obelura Burr, 1907, *Trans. ent. Soc. Lond.* 1907 : 119 (type species: *Neolobophora tamul* Burr, 1901).

Syntonus Burr, 1910, *Fauna Brit. India* : 199 (type species: *Opisthocosmia neolobophoroides* Burr, 1901) syn. nov.

The five species now listed in this genus are similar in general structure to fig. 3; they are noted below, with comments.

Obelura tamul (Burr)

Neolobophora tamul Burr, 1901, *J. Bombay nat. His. Soc.* 14 : 67 (♂ holotype, British Museum (Natural History)).

Obelura tamul (Burr): Burr, 1907, *Trans. ent. Soc. Lond.* 1907 : 120.

Obelura tamul (Burr): Burr, 1910, *Fauna Brit. India* : 184.

Obelura tamul (Burr) L. Burr, 1911, *Genera Insectorum* 122 : 90.

The holotype has data: Ceylon, Thwaites, ex.coll.Westwood, and is labelled *"Neolobophora tamul* ♂ Burr type, M. Burr". The length of the body is 3 mm., and the forceps 5 mm. The figure of the type in Burr (1910, Pl. VII, fig. 65) is excellent. An error seems to have been made in Burr (1910, p.184) is that the locality is given as "Nuwara Eliya, ♂, in Burr collection"; apart from the type there is a specimen from Nuwara Eliya in the British Museum (Natural History) but this lacks forceps.

Obelura neolobophoroides (Burr) comb. nov.

Opisthocosmia neolobophoroides Burr, 1901, *J. Bombay not. Hist. Soc.* 14 : 335 (♂ holotype, ♀ allotype, British Museum (Natural History).

Syntonus neolobophoroides (Burr): Burr, 1910, *Fauna Brit. India* : 200.

Syntonus neolobophoroides (Burr): Burr, 1911, *Genera Insectorum* 122 : 96.

In the original description Burr gives "Habitat: Ceylon, Hatton, VII.97 (O.S.W.). I received a male and female of this species from Mr. Green." Burr (1910) however gives two

localities: "Ceylon: Kudaga, Hatton, vii (coll. Burr), Hakgala (Willey, coll. Burr). Type in author's collection." He also remarks "Superficially like *Obelura tamul* and *Sondax repens* but easily recognized by the short but complete free elytra." The female type has a locality label (Kudaga, Hatton) and it is labelled as the female type; the male type has lost the locality label, but the malformation of the forceps leave no doubt that this is the holotype from Hakgala, and it has now been so labelled.

Obelura montana (Hincks) comb. nov.

Syntonus montanus Hincks, 1947. *Ark. zool.* 39 A: 38 (♂ holotype, Stockholm Museum).

This species, from Kambaiti, North Burma, measures 7 mm. in body length with forceps 3.5 mm. The forceps are separated at the base, then contiguous for a short distance at the level of an internal flange, after which the branches gently and regularly curve to apices.

Obelura asiatica (Bormans)

Neolobophora asiatica Bormans in Bolivar, 1897. *Ann. soc. ent. Fr.* 66 : 285 (♂, ♀, syntypes, ?).

Obelura asiatica (Bormans): Burr, 1910, *Fauna Brit. India*: 183.

Obelura asiatica (Bormans): Burr, 1911, *Genera Insectorum* 122 : 90.

The types, from Kodiakanal, South India, measure 7-10.5 mm., with forceps 3.5-7.5 mm. The forceps (fig. 4) are very similar to those of *Cosmicula flavicornis* Hincks from Burma, which has lateral longitudinal ridges along the elytra. Whether *asiatica* has such ridges, and therefore is not in *Obelura,* can only be settled with an examination of the types.

Obelura dubia (Bormans) comb. nov.

Opisthocosmia dubia Bormans, 1894, *Annali Mus. civ. Stor. nat. Giacoma Doria* 34 : 399 (♀ holotype, Genoa Museum).

This species is only yet known from the holotype from Burma, the measurements which were given as body 7.5 mm., forceps 3.5 mm. and is the species later recorded as *Emboros dubia* (but only the Burma record) by Burr (see Brindle, 1978). A blackish species with long simple forceps, the male being unknown.

Syntonus ensifer Burr (Burr, 1912, Annln naturh. Mus. Wien 26 : 107) is based on a holotype from Peru, and this has been examined through the kindness of Dr. A. Kaltenbach of the Vienna Museum. The species is of a fairly uniform dark yellowish-brown(possibly slightly tenereal), almost entirely glabrous and impunctate, and there are no lateral longitudinal ridges on the elytra; each branch of the forceps has an almost dorsal tooth towards the base, and medially on the last tergite near the posterior margin is a large erect tooth-like projection (figs. 1, 2); the antennae are missing. The labels read Callanga, Peru, Staudinger/collection Br.v.W./THPE/*Syntonus ensifer* ♂, det. Burr/Derm. Inv. No. 299.

From the examination of this specimen it seems clearly

to belong to the Neotropical genus *Neolobophora* Scudder, so *ensifer* is hereby transferred to this genus. There appear to be no clear similarities between *ensifer* and any of the species now included in *Obelura.*

I am indebted to Mrs. J. A. Marshall and Dr. D. R. Ragge of the British Museum (Natural History) for permission to examine the types of *O. tamul* and *O. neolobophoroides,* and for facilities in their department, and to Dr. A. Kaltenbach of the Vienna Museum for the loan of the type of *N. ensifer* (Burr).

References

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Butterflies on my Mind by **Dulcie Gray.** Illustrated by **Brian Hargreaves.** pp. 125. Published by Angus & Robertson at £5.75. ISBN 0 207 95804 1.

Yet another book on butterflies which adds nothing to our knowledge. Why, when there is not a single work since Meyrick which deals with all our Lepidoptera, must publishers print endless books on this one small group of the Order, rehashing all the old material. Exceptions of course are E. B. Ford's "Butterflies" with its emphasis on Genetics and T. G. Howarth's revision of South's definitive work.

This book is pleasantly written and no exception can be taken to those parts to which the author is indebted for expert advice, but when she expresses her own views on conservation, she falls into the common error of misunderstanding the true meaning of the word and of obscuring reason by sentiment. It is useless to try to conserve species which are on the way to extinction because of changes in climate and habitat. Take care of the habitat and the species will take care of themselves, if possible. The cases of The Large Copper at Wood Walton and of the Swallowtail at Wicken are examples of useless endeavour. The Large Blue has declined rapidly in its "last" habitat since it has been managed. We have been informed of marked specimens in pill boxes left in the sun to be weakened by desiccation while waiting to be released.

Miss Gray would do better to insist on encouraging the rabbit in Devon, persuading the Forestry Commission to widen rides, plant an oak and a sallow for every conifer, let bramble, thistle and honey-suckle line the rides as they did in Tilgate and the New Forest before the war, and to pray for a few more summers like 1976, which showed how quickly species can build up their populations and spread.

The book is well printed with a good bibliography, but the illustrations lack the quality of Mr. Hargreave's work in the Ray Society's publication though they are not as bad as some of his recent work. As for the picture of the small boy with his net, how else did the author's advisors start? He is likely to become a better and wiser man than his mugging and football hooligan contemporaries. — E.H.W.